

Agriculture Leadership

Grade Levels: 9, 10

Course Mission:

To introduce agriculture students to the four major areas of agriculture education: plant science, animal science, natural resources and agriculture business. This course also introduces students to the FFA organization and the opportunities for agriculture leadership.

Major Units of Study:

- 1 quarter (9 weeks) = Plant Science
- 1 quarter (9 weeks) = Animal Science
- 1 quarter (9 weeks) = Natural Resources
- 1 quarter (9 weeks) = Agriculture Business

State Standards Addressed in this Course:

Standard C:

A.9-12.1

A.9-12.2

A.9-12.3

B.9-12.1

B.9-12.2

B.9-12.4

B.12.5

B.12.6

C.9- 12.1 Engage in applied learning experiences that require using leadership techniques

C.9-12.2

C.9-12.3

C.9-12.4

D.9-12.1

D.9-12.2

D.9-12.3

D.9-12.4

E.9-12.1

E.9-12.2

E.9-12.3

E.12.5

E.12.6

Concepts & Skills by Unit (concepts/skills in bold mastery essential for all students)

Unit: Plant Science

Essential Understandings / Concepts Covered /“What students should know”:

- Describe the major functions of roots, stems, fruits, and leaves.
- Explain how plants make food.
- Describe the rolls of air, water, light, minerals, and nutrients in plant growth.
- Distinguish between sexual and asexual plant reproduction.
- Identify common grains, forages, vegetables, fruits, flowers, and landscape ornamentals.
- Understand the economic importance of plants in society.

Process Skills / “What students should be able to do”

- Draw and label the reproductive parts of seeds and flowers.
- Perform seed propagation and seedling care.
- Perform asexual propagation by cuttings, division, and layering.
- Plan and design a plant science enterprise.

Unit: Animal Science

Essential Understandings / Concepts Covered / “What students should know”:

- Define common terms associated with domesticated animals.
- Identify common breeds of domesticated animals.
- Understand the importance and the purpose of domesticated animals.
- Identify signs of good and poor animal health.
- Evaluate animals for type and production.
- Recognize the major nutrient requirements in a balanced ration.
- Evaluate animals for type and production.

Process Skills / “What students should be able to do”

- Label and identify the body parts of cattle, sheep, hogs, horses, and dogs.
- Evaluate animals for type and production.
- Perform basic animal feeding, grooming, and facility care.
- Plan and design an animal enterprise.

Unit: Natural Resources

Essential Understandings / Concepts Covered / “What students should know”:

- Define natural resources terms.
- List the importance of soil and water conservation.
- Identify the types of soils.
- Explain the process of land measurement.
- Identify characteristics of wildlife.
- Identify types of wildlife.

Process Skills/ “What Students should be able to do”:

- Collect a soil sample with a soil auger.
- Perform a soil pH test.
- Calculate board feet.
- Illustrate an ecosystem.
- Perform land ownership exercises using the Jefferson County plat book.

Unit: Agriculture Business

Essential Understandings / Concepts Covered / “What students should know”

- Describe the agriculture marketing chain.
- Understand the law of supply and demand.
- Explain the economic importance of agriculture.
- Describe the importance of management.
- List the eight steps in decision making.
- Understand the use of credit and a healthy debt to equity ratio.
- Discuss the factors that influence commodity pricing.

Process Skills/ “What Students should be able to do”

- Prepare a power point on an agriculture company outlining their purpose, product lines, and marketing techniques.
- Calculate net worth.
- Prepare a personal budget.
- Illustrate a promotional advertisement for an agricultural product.
- Analyze and calculate agriculture commodity cash and future prices.

Unit: Agriscience and Leadership

Essential Understandings / Concepts Covered / “What students should know”

- Identify historical developments in Agriscience.
- Identify trends in agriculture.
- Explain career opportunities available in agriculture.
- Explain the history and current importance of Agriculture Education and the FFA.
- Define and identify supervised agriculture experience programs.
- Understand the importance of clear goals and objectives.
- Define the major traits of good leaders.
- Describe the opportunities for leadership development in the FFA.
- Understand the forms of effective communications.
- Define the purpose, motions and meanings of parliamentary procedure.
- List the duties of elected officers.
- Recognize the importance of community service.

Process Skills/ “What the student should be able to do”

- Plan and implement a supervised agriculture experience program.
- Recite the FFA Creed.
- Set personal goals and objectives.
- Demonstrate proper parliamentary procedure skills.
- Demonstrate positive leadership skills.
- Organize and implement a community service project.